

Breakfast with Matt

Matt Doody
NOAA / National Weather Service
Taunton, MA

ABSTRACT

Breakfast with Matt has gone through several iterations since the first Southern New England Weather Conference. Starting as “Breakfast with Walt” with the famous Walter Drag, it was taken over by Hayden Frank, a senior forecaster at the National Weather Service in Taunton, Massachusetts. Matt Doody, a forecaster at the NWS in Taunton, took it over in 2012, a great year to start, considering that post-tropical storm Sandy was only about 3-4 days from making landfall!

Breakfast with Matt is an informal discussion of almost every and anything weather. If there is another impending high-impact weather event, the discussion will focus on it, otherwise feel free to bring questions, comments about weather or weather-forecasting. Great internet links that allow you to do your own at-home weather forecasting will also be made available.

PRESENTER’S BIO

Matt Doody is a meteorologist at the National Weather Service Office in Taunton, Massachusetts. He was born and raised in Caribou, Maine. He credits his love for weather to his grandmother, who, at their family camp, used to stay up late at night and watch thunderstorms with him.

Matt went to Caribou High School in Caribou, and attended college at the University at Albany in Albany, New York. At the University at Albany, he earned his undergraduate degree in Atmospheric Science and went on to earn his M.S. in Atmospheric Science under Drs. Lance Bosart and Daniel Keyser. His thesis focused on climatology of strong anticyclones globally.

Matt began his career in meteorology when he volunteered as a student intern at both the Albany, New York and Caribou, Maine National Weather Service offices, and started his career with the National Weather Service as a Meteorologist Intern at the office in Caribou. He joined the team in Taunton, Massachusetts in January of 2011. Matt lives in Massachusetts.

Weather Forecasting & Oil Spill Response

Stephen M. Lehmann
Senior Scientific Support Coordinator
National Oceanic and Atmospheric Administration
Lowell, MA

ABSTRACT:

Since the wreck and oil spill of the tank vessel ARGO MERCHANT in 1976 in Nantucket Sound, the National Oceanic and Atmospheric Administration (NOAA) has coordinated the scientific input to federal decision-makers on major marine disasters. In the past 40 years, NOAA has responded to virtually every major oil spill in the world and as a result, it stands as one of the leading experts in spill forecasting, impact mitigation, environmental injury assessment, and post-impact restoration. One of the key elements to NOAA's emergency response activities is weather analysis and monitoring as a driver for accurate oil trajectories, on-site worker safety, long range forecasting for contingency planning, to name a few. As weather forecasting improves, so does oil spill response science. This talk will focus on the NOAA's emergency response functions and its long and close relationship to the weather forecasting.

PRESENTER'S BIO:

Stephen Lehmann has served as the NOAA Scientific Support Coordinator (SSC) for the New England region since 1990, providing training, contingency planning support and coordinating scientific advice to the US Coast Guard, state agencies and others. He has acted as the SSC for every notable marine pollution emergency in the region during that time. In addition, Mr. Lehmann has developed contingency plans, providing training or coordinated on-scene scientific support on major spills around the country and internationally. These include such notable events as:

Representing NOAA:

- National Response Team:
 - Chairman Science & Technology Comm.: 2006-Present
 - Executive Secretariat: 2006-Present

- Regional Response Team One (New England): 2005-Present
- Regional Response Team Five (Great Lakes & Inland Rivers): 2005-Present
- Joint US/Canada Response Team (Atlantic and Great Lakes): 2005-Present
- Interagency Coordinating Committee for Oil Pollution Research: 2008-Present
- Technical Support Team to US Navy COMFIFTHFLEET (Southwest Asia): 2004-Present

On-Scene Spill Responses include:

- Deepwater Horizon Event, Louisiana 2010: Area Command
- Persian Gulf War Oil Spill 1991
- Exxon Valdez, 1990, 1991, 1992
- Wellborn, Madagascar 1993
- North Cape, Rhode Island 1996
- Julie N, Maine 1996
- TWA 800 Crash, Long Island 1996
- Aircraft N9253 Recovery, Massachusetts (John F. Kennedy, Jr.) 1999
- Selendang Ayu, Alaska 2004
- Athos-1, Pennsylvania 2004
- DBL-152, Texas 2005
- Bouchard 120, Massachusetts 2003
- Hurricane Katrina oil spills, Louisiana 2005
- Empire Knight, Maine (sunken WWII ship, 8 tons of mercury, ongoing)
- Bow Mariner, Virginia 2004
- Hurricane Ike Response, Texas 2008
- Hurricane Sandy Response, New York/New Jersey 2012
- Morris J. Berman, Puerto Rico 1994
- US Navy Base-Roosevelt Roads, Puerto Rico 1999

Picture Posts & Citizen Science

Craig Austin
Geographic Information Systems Analyst
Massachusetts Office of Geographic Information
Boston, MA

ABSTRACT:

The Picture Post Program, part of the Digital Earth Watch (DEW) network, run by the University of New Hampshire, is a 'Citizen Science' project where people from all kinds of backgrounds, such as students, classrooms, park staff/volunteers, and researchers, can participate by taking digital pictures periodically at a specific location using a fixed post and fixture at that location. There are well over one hundred Picture Post sites, located all over the United States. Three such posts, maintained by the Blue Hill Meteorological Observatory, are on the summit of Great Blue Hill, including the tower itself, which has a 360 degree view of the far landscape. Over five years of picture post image sets have been taken from these locations, most taken a week apart. With this library of image sets, opportunities exist to educate students about the cycles of vegetation (phenology) through visual comparison of these images and analysis using them. This workshop: introduces the Picture Post Program; features the three Picture Post sites on the summit of Blue Hill; highlights and demonstrates some activities that can be done with these images - using prepared slide shows using Picture Post images; and describes different ways that teachers can obtain existing image sets or take their own.

PRESENTER'S BIO:

Craig Austin is a 20 year plus volunteer with the Blue Hill Meteorological Observatory, and a long-time volunteer with other environmentally oriented organizations such as the Charles River Watershed Association, the Neponset River Watershed Association, and Massachusetts Audubon (in fact, he will be participating in the Halloween Prowl at Moose Hill Wildlife Sanctuary right after this conference!). Craig is currently a Geographic Information Systems (GIS) Analyst for the Massachusetts Office of Geographic Information (MassGIS). His primary duties there are managing data related to parcels and structures across the Commonwealth which supports the management of data used in the NextGen911 standard.

Ready For Hurricane Rhody?

Stephen Conard
Rhode Island Emergency Management Agency
Cranston, RI

Dr. Isaac Ginis
University of Rhode Island Graduate School of Oceanography
Narragansett, RI

ABSTRACT:

Emergency managers and planners need to be informed about the consequences of extreme hurricanes in order to reduce risks for coastal communities. Researchers at the University of Rhode Island involved in the Department of Homeland Security (DHS) Coastal Resilience Center of Excellence collaborated with NOAA's National Weather Service (NWS) Office, the DHS Office of Cyber and Infrastructure Analysis (OCIA), Federal Emergency Management Agency (FEMA) Region 1, and Rhode Island Emergency Management Agency (RIEMA) to create a hypothetical high-impact scenario, "Hurricane Rhody", for Southern New England.

The effort uses multiple, independent, numerical models to create an ensemble of model solutions that integrate hazards, impact models, and 3D visualization tools into one unified computational framework. RIEMA held an Integrated Emergency Management Course in Warwick and Cranston, RI, and successfully integrated Hurricane Rhody simulations for our four-day training & exercise in June 2017. Impact analysis included "thresholds data" collected from local facility managers and Emergency Managers as well as OCIA to capture their specific concerns about damages to their facilities. The 3D visualizations maximized the utility of outputs from numerical models to produce real-time hazard impact analyses that increased relevance and credibility. These new capabilities will help emergency managers and planners understand how major hazard events impact critical infrastructure, utilities, and transportation and the associated challenges in managing multiple threats with limited resources.

PRESENTERS' BIOS:

Isaac Ginis is professor of oceanography at the University of Rhode Island Graduate School of Oceanography. He has an international reputation as a leading expert in numerical modeling of air-sea interaction. Ginis and his research group have developed and implemented improvements to the operational hurricane forecast models used by NOAA's National Hurricane Center. They are currently funded by the U.S. Department of Homeland Security Coastal Resilience Center of Excellence to develop advanced modeling capabilities to provide most realistic representation of hurricane hazards and impacts in the southern New England. This project will allow DHS and other agencies to better understand the consequences of coastal and inland hazards associated with extreme hurricanes and to better prepare coastal communities for future risks. Ginis is one of the lead developers and science advisors of the educational, multi-disciplinary website and iBook, Hurricanes: Science and Society, which have become classroom tools for science educators nationwide.

Stephen Conard is the State Exercise Officer for the Rhode Island Emergency Management Agency (RIEMA). Stephen has been with RIEMA for over 7 years starting as an intern under the All-Hazard Planning program. Stephen supported the municipalities through planning initiatives and developing the RI School Safety Program, which currently lives on at the RI State Police. Two years ago, Stephen began an initiative at RIEMA to assist the 39 municipalities in becoming recognized StormReady communities. About 1 year ago, Stephen began developing the curriculum for RIEMA's Integrated Emergency Management Course (IEMC) that was to be held in June of 2017. This course brought together RI stakeholders, but also crossed in the educational Subject Matter Experts of Hurricane Science and Modeling from the University of Rhode Island Graduate School of Oceanography (URI GSO). Together, RIEMA and URI GSO developed real world modeling of a built storm titled Hurricane Rhody; this storm was developed taking the Hurricanes of 1938, Carol in 1954, and Esther in 1961. Through discussion and discovery sessions, the group could extrapolate the best visuals for inclusion in the IEMC, as well as to begin to utilize RIEMA's MOU with URI and how this support can be maintained moving forward.

Weather in the Classroom:

Demonstrations, Experiments, Projects & Web Resources for a Dynamic Weather Unit

A.J. Burnett
WCVB-TV Channel 5
Needham, MA

ABSTRACT:

Weather can be one of the most enjoyable curriculums both to teach and to learn. Yet, the challenge has always been finding good content and resources for the classroom. This presentation will offer some ideas for class demonstrations, experiments and longer term projects, as well as showcase some good resources available on the web.

PRESENTER'S BIO:

A.J. Burnett is a meteorologist and the weather producer for WCVB-TV, the ABC affiliate in Boston. He holds a degree in meteorology from Rutgers University and was awarded the American Meteorological Society's Television Seal of Approval for excellence in broadcast meteorology.

Burnett began his career as a meteorologist at Weather Services Corporation, where he forecasted for radio stations throughout the country. He then moved on to WSI where he began appearing on Fox News Channel during severe and breaking weather situations. During that time, Burnett also began filling in at FOX25 in Boston until he became a fulltime member of the FOX25 weather team in 2004. Burnett has also worked at other stations in New England, including WMUR in New Hampshire, New England Cable News, and WCSH6 in Portland, Maine. He began working at WCVB in January of 2016.

Burnett also spent a short time teaching high school on the North Shore. Courses included Earth Science, Environmental Science, Marine Biology and Algebra II.

A.J. and his wife, Carrie, live on the North Shore of Massachusetts with their two beautiful daughters – Grace and Caroline.

Two Unusual Tornadoes in Southern New England

Hayden Frank
NOAA / National Weather Service
Taunton, MA

ABSTRACT:

While the frequency of tornadoes in southern New England is much less than the central United States, it is common for a few to occur each year. This presentation will discuss two of the more particularly unusual tornadoes.

The first was an EF1 tornado that occurred in Concord, MA. This tornado touched down at approximately 3:20 a.m. on August 22, 2016. This tornado resulted in mainly tree damage along with minor structural damage to some houses, but fortunately there were no injuries. What made this tornado quite unusual was that it did not contain any lightning. It was also first tornado to have occurred during the overnight hours in Massachusetts since 1970.

The second tornado was a high end EF-1 Tornado that occurred in a small part of Goshen and particularly Conway, MA. What made this tornado unusual was that it occurred during the early evening hours of February 25, 2017. It was the first tornado known to have ever occurred in Massachusetts during the month of February, since official tornado statistics began in 1950. Several houses experienced significant damage along with numerous tree and power lines that were knocked down. There was one minor injury, but fortunately no serious injuries or fatalities given the extent of the damage.

PRESENTER'S BIO:

Hayden Frank is a senior meteorologist with the National Weather Service in Taunton, MA. He is the severe weather, marine and outreach focal point, and also serves as the assistant fire weather focal point for the office. He also works on various other programs, including StormReady and numerous research projects.

Hayden was born in Philadelphia, PA and always had a love for meteorology from a very young age. He graduated from the Pennsylvania State University in 1998 with a Bachelor's Degree in Meteorology. After graduation, Hayden accepted a temporary job with the National Weather Service in Tulsa, OK. Six months later, he became a permanent National Weather Service employee with the office in Wichita, KS before transferring to Taunton in 2003. Hayden loves all kinds of weather, but always had a special interest in snowstorms, so living in New England is a perfect fit for him.

Decision-Making in the Face of Weather Hazards: There's No App For That!

Dr. Kevin Kloesel
University of Oklahoma Office of Emergency Preparedness
Norman, OK

ABSTRACT:

Holding, postponing, rescheduling or cancelling concerts, athletic events, festivals, fairs, etc. in the face of natural hazards such as hurricanes, lightning storms, tornado threats, or intense cold or heat have become the subject of intense scrutiny as the potential for loss of life and property is weighed against the economic benefits of having these events. In addition, weather forecasts are inherently probabilistic and chock full of uncertainty, while at the same time, an event decision is deterministic, requiring a go or no-go outcome. This session will put you in the decision-makers' hot seat for many recent events that were weather threatened and ask you the question, "Yes, or No." Session goers will leave with a list of questions that each should ask before attending a fair, concert, or athletic event that could be impacted by hazardous weather.

PRESENTER'S BIO:

Kevin Kloesel is the University Meteorologist for the Office of Emergency Preparedness at the University of Oklahoma. He is responsible for weather forecasting and decision-making for every outdoor event on the OU campus, and serves as an advisor to OU President Boren on all weather matters, including campus closure and event emergency planning. Kevin has also co-authored the University's weather and communications annexes to the OU Emergency Operations Plan and is responsible for authoring/reviewing the weather plans for every event at OU. In addition, Kevin chairs the Weather Advisory Board for the Event Safety Alliance, and is a contributing writer for Campus Safety Magazine, Protocol - The Journal of the Entertainment Technology Industry, and Event Safety Insights Magazine. He has appeared on numerous national, regional and local media programs including The Weather Channel's WXGeeks, SXSW Eco, WeatherBrains, and the National Academies of Sciences Distinctive Voices. Kevin is a certified Oklahoma Emergency Manager, the Director of the Oklahoma Climate Survey, and an associate professor in the College of Atmospheric and Geographic Sciences at OU.

GOES-16: First Looks and Early Lessons Learned at the National Weather Service!

Michael Folmer
NOAA / Weather Prediction Center
Silver Spring, MD

ABSTRACT:

The GOES-R Proving Ground Program was conceived to demonstrate and familiarize forecasters with the next generation geostationary satellite products and capabilities that will be incorporated into National Weather Service (NWS) and National Environmental Satellite, Data, and Information (NESDIS) operations. The Satellite Proving Ground for Marine, Precipitation, and Satellite Analysis (MPS PG) has been an active participant in the larger GOES-R Satellite Proving Ground for about six years and consists of the NWS Ocean Prediction Center (OPC), Weather Prediction Center (WPC), Tropical Analysis and Forecast Branch (TAFB) of the National Hurricane Center, and the NESDIS Satellite Analysis Branch (SAB). The first six years have focused on introducing new GOES-R proxy products to forecasters using current data from GOES, MTSAT, METEOSAT, MODIS (Aqua and Terra), and S-NPP. With the advent of the Himawari-8 Advanced Himawari Imager (AHI) and the GOES-16 Advanced Baseline Imagery (ABI) and Geostationary Lightning Mapper (GLM) into the operational satellite suite at these centers, the forecasters are being introduced to satellite imagery and products at higher spectral, spatial, and temporal resolutions. The ABI consists of 16 channels, many of which are new to forecasters, therefore the Proving Ground is in the process of highlighting uses that will build on the official NWS training.

The GOES-R satellite was launched on 11/19/16 and once it achieved orbit at 22,300 miles above Earth, the satellite was renamed GOES-16. It is currently in Beta testing and the data will become provisional around 06/01/17. The final operational position (East/West) will be determined soon and the satellite will officially become operational in November 2017. This presentation seeks to highlight some of the initial success stories and lessons learned from the preliminary, non-operational data that have been used operationally at National Weather Service Offices and National Centers.

PRESENTER'S BIO:

Michael Folmer is a Satellite Liaison at the NWS Ocean Prediction Center, Weather Prediction Center, Tropical Analysis and Forecast Branch of the National Hurricane Center, and the NESDIS Satellite Analysis Branch. Michael graduated with his B.S. in Meteorology from the University of Miami and received his M.S. and Ph.D from Saint Louis University. His background is tropical cyclones, but he has been part of the GOES-R and JPSS Proving Grounds since 2011, introducing new satellite products and techniques to forecasters in the aforementioned centers. He also does much outreach at NWS Weather Forecast Offices and universities, among other places.

Pauline Morrow Austin (1916-2011) – MIT Pioneer Of Weather Radar Research

Lodovica Illari
Massachusetts Institute of Technology
Cambridge, MA

ABSTRACT:

We review the life of Radar Meteorologist Pauline Morrow Austin, one of the first women Doctoral graduates at MIT. Austin studied physics under Prof. Julius A. Stratton (later President of MIT, 1959-1966) and earned a Ph.D. in 1942 on the propagation of electromagnetic waves in the ionosphere. Austin began working on radar research during WWII in MIT's famous 'Rad Lab' and subsequently studied applications of radar to meteorology. She directed the MIT Weather Research Project from 1956 to 1979, overseeing major developments of radar technologies, including its digitalization in the early 1970s. She spent most of her life studying cloud microphysics with the aim of quantifying rainfall estimates from radar signals. Austin's work laid the groundwork for much of the research in to radar meteorology during the second half of the 20th century. Many of her students are now leading experts in the field. Recently, in December, 2016, MIT celebrated the centenary of Austin's birth and the impact of her life on meteorology. We will end by sharing a short video stemming from that event which summarizes her life.

PRESENTER'S BIO:

Lodovica Illari is a Senior Lecturer in the Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology, Cambridge, MA. She earned a Ph.D. in Atmospheric Sciences at Imperial College, London, in 1982. A synoptic meteorologist, she teaches large-scale dynamics and synoptic meteorology in MIT's undergraduate and graduate programs. She is responsible for the Synoptic Laboratory: <http://synoptic.mit.edu>. Illari's research interests are in synoptic meteorology, severe weather, and atmospheric blocking. She is also involved in (i) developing innovative teaching methods that combine fluid laboratories with synoptic data and (ii) outreach to the public and schools. For more see Weather in a Tank - <http://weathertank.mit.edu/>

Capturing Glaciers

Adam LeWinter
Cold Regions Research and Engineering Laboratory
Hanover, NH

ABSTRACT:

For the big, active glaciers flowing into oceans around the globe, the term “glacial pace” does not apply. These immense icescapes display drastic changes, through continuous dynamic flow similar to large rivers and catastrophic calving events. The sheer scale of these ice streams, in places over ten miles wide and hundreds of miles long, challenges the human mind to both perceive and relate. In this talk Adam LeWinter, a scientist at the Cold Regions Research and Engineering Laboratory and part of the team that created the Extreme Ice Survey and Emmy award winning documentary Chasing Ice, presents a brief history of time-lapse photography and the development of automated laser scanning to capture and quantify motion and change at the world’s largest and fastest glaciers.

You’ll learn about film cameras setup in Alaska in the 1980s, to state-of-the-art laser scanning systems capable of running autonomously in the harshest environments. To highlight the incredible forces at play, LeWinter will present video captured at one of these large tidewater glaciers, Ilulissat Glacier, when he and a colleague witnessed a calving event beyond description, with chunks of ice larger than football stadiums breaking off into the ice-ridden fjord.

PRESENTER’S BIO:

As a research physical scientist, Adam LeWinter conducts research in the field of terrain analysis and remote sensing for characterizing terrain based processes using Light Detection and Ranging (LiDAR) technology. He is a LiDAR subject matter expert within the U.S. Army Corps of Engineers. He specializes in change detection and quantification of large terrain movement over time, sensor integration, and LiDAR systems development. He applies ground based and airborne LiDAR technologies towards topographic surface change measurements and flow estimation in glacial, volcanic, and seismic environments; conducts building thermal envelope assessments using a custom designed LiDAR/thermal infrared camera

system; develops automated terrestrial laser scanning systems for constant monitoring of snow and ice; incorporates time lapse photography for studying tidewater and land-terminating glacier dynamics and ice sheet ablation zone monitoring; supports research in snow water equivalent (SWE) estimation in mountains; and develops automated climate stations, time-lapse cameras, thermal infrared camera systems, and laser profiling systems for use in remote locations. LeWinter is building programs within CRREL around LiDAR/thermal infrared sensor integration and the use of unmanned airborne systems for LiDAR/imagery collection, along with rapid and low-cost deployment of airborne LiDAR sensors. Prior to joining the technical staff at CRREL, LeWinter worked with the Extreme Ice Survey (EIS). His experience before EIS was as a design engineer and machinist, bringing his practical experience in product design and fabrication to the custom made time-lapse camera packages used by EIS. LeWinter also managed the expeditions and fieldwork for EIS, as well as capturing the project through still photography and video, and was part of the Academy Award winning production team on the documentary Chasing Ice.

TV Meteorologist Media Panel 2017

Harvey Leonard
Chief Meteorologist, WCVB-TV Channel 5
Needham, MA

Harvey Leonard is WCVB Channel 5's chief meteorologist. Leonard forecasts for NewsCenter 5's early evening and late newscasts, as well as the station's website, www.WCVB.com. He joined the station in 2002 as Storm Team 5's co-chief meteorologist with his longtime friend Dick Albert, who retired in 2009.

Leonard has worked as a tv meteorologist in New England for over 40 years. Prior to joining WCVB, Leonard served as chief meteorologist for WHDH-TV from May 1977 to April 2002. He also served as chief meteorologist at WPRI-TV in Providence, RI. Leonard began his forecasting career as a meteorologist for Universal Weather Services, Inc, preparing forecasts for aviation and industry.

Widely regarded as one of Boston's top meteorologists, Leonard has received numerous awards throughout his luminous career. Among the highlights, he was recently honored with the Governor's Award for Lifetime Achievement by the 2016 Boston/New England Emmys. He was voted "Best Weatherperson" for 2015 by Boston Magazine in the People's Choice category, making it the fifth time in his career the magazine's readership bestowed him this honor. He was also previously voted the Hub's "favorite forecaster" by the Improper Bostonian. In addition, Leonard earned four New England Emmy Awards for outstanding achievement in television weathercasting. In 2003, Leonard was recognized with the Silver Circle Award from NATSNE (National Academy of Arts and Sciences New England Chapter) for more than twenty-five years of broadcast excellence. Leonard is a Fellow of the American Meteorologist Society and was awarded their prestigious Outstanding Service Award by a Broadcast Meteorologist, which recognized and lauded his work on a national level. He is credited as the first meteorologist to correctly predict the impact and intensity of the Blizzard of '78.

An active member of the community, Leonard is involved in numerous local organizations including the Huntington's Disease Society of America, for which he participates in annual fundraisers to help find a cure while

providing support and services for those living with the disease and their families. For several years, he lent his time and talent to the Walk to End Alzheimer's event as co-master of ceremonies, and he has served as master of ceremonies for Boston Prostate Cancer Walk. Leonard has also lent his support to Boston Medical Center, the primary teaching affiliate for the Boston University School of Medicine. Additionally, he has been a speaker at educational seminars held by the Massachusetts Emergency Management Association and an avid supporter of the Blue Hill Weather Observatory. Leonard has also served as an honored guest speaker at Harvard Business School and the Massachusetts Institute of Technology (MIT).

Over the years, Leonard has visited and spoken to hundreds of school and adult groups. He has been a mentor to numerous aspiring meteorologists and today well over a dozen of his protégé serve as on-air meteorologists in markets across the country.

Leonard received a Bachelor of Science degree in meteorology from City College of New York and earned a Master of Science degree in meteorology from New York University, where he also served as an instructor in meteorology.

Leonard is an avid tennis player and enjoys hiking trails, particularly around Walden Pond and Woods Hole. He currently resides in Natick, MA, with his wife. They are the proud parents of two daughters and are grandparents to four beautiful grandchildren.

Shiri Spear
Boston 25 News WFXT-TV
Dedham, MA

Shiri Spear joined WFXT in November 2012 as the Boston 25 Morning News meteorologist. She is a native New Englander, raised in Hollis, NH. Shiri is no stranger to the challenges of forecasting New England weather. She has forecasted and reported on everything from Nor'easters to ice storms to spring flooding and major droughts during her time in the Boston 25 StormTracker Weather Center.

Prior to WFXT, Shiri was a meteorologist at WTVJ, NBC6, in Miami. Before that she was a meteorologist and environmental reporter at WWLP-TV22 News, the NBC affiliate in western Massachusetts.

Shiri's studies to become a meteorologist started at McGill University in Montreal, Canada. She then relocated to Camp Lejeune, NC where her husband, a US Marine, was stationed. While in North Carolina, Shiri's focus turned to education.

Shiri moved back to her hometown in New Hampshire when her husband Matt was deployed. She completed her B.A. in Secondary Mathematics Education at Rivier University in Nashua and taught preschool full time. Shiri traded 7th grade pre-algebra to follow her passion for weather and forecasting. She earned a M.S. in Atmospheric and Environmental Science from UMass Lowell in 2007.

Shiri stayed true to her New England roots forecasting at WWLP-TV22 in Springfield, MA for over three years. She also sharpened her tropical forecasting skills at WTVJ in Miami from 2010 to 2012. Shiri and her WTVJ colleagues earned two Emmy nominations for their annual Hurricane Specials.

Shiri was awarded her CBM accreditation from the American Meteorological Society in 2012.

She and her husband have two young daughters. Shiri loves to bake and follows the motto: more chocolate, more delicious!

Jacob Wycoff
WGGB/WSHM Western Mass News
Springfield, MA

Growing up in Northeast Ohio, **Jacob Wycoff** got hooked on weather at a very early age. The spring of 1993 featured the “Storm of the Century” Blizzard, burying the region under nearly two feet of snow. A month later, a small tornado touched down in his hometown. Finally, in 1996, the movie *Twister* was released, solidifying Jacob’s desire to one day become a meteorologist.

Twister remains Jacob’s favorite movie.

Jacob graduated from Western Connecticut State University with a degree in Operational and Theoretical Meteorology. Upon graduation, Jacob joined EarthNetworks. At the time, it was the parent company for WeatherBug.

He joined Western Mass News in Springfield in November 2015 and he started freelancing for WBZ CBS Boston in May 2017.

He enjoys the difficulty in forecasting for New England. When he’s not geeking out over the weather, Jacob enjoys spending time with his wife Sujata and daughter Francesca.

Barry Burbank
WBZ-TV 4 CBS Boston
Boston, MA

Barry Burbank is currently the weekend morning and primary relief weekday morning meteorologist for WBZ-TV4 and WBZ NewsRadio 1030 in Boston. Over most of his career, he was the weekend evening and substitute weekday meteorologist except from 1998-2008 when he was the weekday morning meteorologist. He joined WBZ-TV on March 1, 1978 after serving two years as Maine's first professional television meteorologist on WCSH-TV6 in Portland. Over the past 39 years, he has also delivered his weathercasts on WSBK-myTV38 and on many New England radio stations including all of the CBS Radio Boston stations namely 98.5 THE SPORTSHUB, MIX104.1, OLDIES103 and WZLX plus Boston's KISS108 and Worcester's WXLO. He has also provided some weathercasts on the CBS Evening News, CBS This Morning and CBSN. His weathercasts and blogs can also be found on CBSBoston.com with updated weather info on Facebook & Twitter.

A native of Maine, Burbank is a charter member of the Sanford High School Hall of Fame. In 1972, he received a B.S. Degree in Meteorology from Lowell Technological Institute now known as the University Of Massachusetts, Lowell Campus. He received its Distinguished Alumni Award in 1984.

Burbank is a member of the American Meteorological Society. He is a 1980 recipient of its Seal of Approval for Excellence in Television Weathercasting and the 2006 recipient of its Award For Outstanding Service by a Broadcast Meteorologist. In 2005, Burbank received the Silver Circle Award from the National Academy of Television, Arts & Sciences.

In recognition of 25 years of service in predicting weather at WBZ-TV, Boston Mayor Thomas Menino declared February 24, 2003 as 'Barry Burbank Appreciation Day' and Governor Mitt Romney issued a proclamation to recognize Burbank's 25 years of work at WBZ-TV on March 2, 2003.

For about 4 decades, Burbank has delivered entertaining, educational weather presentations to almost 200,000 students at more than 1500 schools!

Burbank has volunteered much time to various charitable organizations. Over the past 20 years, he has raised much money for Jack Williams 'Wednesday's Child' which benefits the Massachusetts Adoption Resource Exchange in finding adoptive families for children in foster care with a focus on special needs adoption. Additionally, he has been a fundraiser for the Dana Farber Cancer Institute by riding in the Pan Mass Challenge and walking in the Boston Marathon Jimmy Fund Walk.

Of the many events he has participated in, his favorite was as a guest narrator of 'Twas The Night Before Christmas" in sync with Keith Lockhart and James Orent & the Boston Holiday Pops on December 17, 2009.

Burbank enjoys an active outdoors life of walking, running, biking, rollerblading, swimming, bodysurfing, kayaking, hiking plus alpine and nordic skiing. He has been married over 37 years and has one daughter, two sons and three grandchildren.

Michael Page
New England Cable News (NECN)/NBC Boston
Newton, MA

Growing up on the South Shore of Massachusetts, **Michael Page** knew he wanted to be a meteorologist at a young age. He started observing and forecasting the weather in his hometown of Hingham while attending middle school, and operated his own weather website right through high school. He went on to study meteorology at The Pennsylvania State University, presenting forecasts on WPSU-TV throughout his time in college.

After college Michael worked at FOX44 & ABC22 in Burlington, Vermont, forecasting for much of Northern New England.

While in Vermont he was named a Certified Broadcast Meteorologist by the American Meteorological Society, the organization's highest seal of approval for a broadcast meteorologist. He's worked at NECN and NBC Boston since 2015.

Chelsea Priest
ABC6 WLNE-TV
Providence, RI

Chelsea Priest joined the WLNE-TV / ABC6 Weather Team in Providence, RI, in August 2011. In January 2015, Chelsea took on the role of the weekday morning and noon meteorologist.

As a Rhode Island native she is thrilled to be forecasting in the same location that sparked her interest in weather as a child. During Hurricane Bob, a tree fell through the roof of her home and from that point on she has been in complete awe of the power that all types of weather can hold.

That interest in weather led Chelsea to Plymouth State University in Plymouth, NH where she received her Bachelor of Science degree in meteorology. Before starting at ABC6, she worked as the morning meteorologist in Zanesville, OH for just under a year. Before Zanesville, Chelsea had internships at both WLNE and WJAR in Providence.

Ryan Hanrahan
WVIT-TV NBC Connecticut
West Hartford, Connecticut

Ryan Hanrahan is a First Alert Meteorologist and can be seen weekdays during the 11 a.m., 4 p.m. and 5 p.m. news on NBC Connecticut. Growing up along the shoreline in Guilford, CT his interest in the weather was sparked by the 1989 Hamden tornado, hurricanes Gloria and Bob, and the blizzards of '93 and '96. Ryan returned to Connecticut in 2005 after working as a meteorologist for WNYT, the NBC affiliate in Albany, N.Y. He received his Bachelor of Science degree in meteorology from the Pennsylvania State University. Ryan also studied atmospheric science in graduate school at the State University of New York at Albany. His weathercasts have been recognized by the American Meteorological Society with their Seal of Approval. In 2016 he was awarded an Emmy for his forecasts.

During his tenure at NBC Connecticut Ryan has covered many of the state's biggest storms including Tropical Storm Irene, Hurricane Sandy, the October snowstorm, the Blizzard of 2013 and the Springfield tornado. Ryan currently lives in West Hartford. Besides forecasting the weather, he enjoys spending his spare time with his golden retriever, Doppler, relaxing on the beach or on the slopes skiing. He also volunteers with Special Olympics Connecticut and visits schools across the state talking about science.

Ryan also writes a blog, ["On Ryan's Radar."](#)